

POLENDAL, Jan, inz.; NOVOTNY, Frantisek, inz.; DUSEK, Antonin, inz.

Organization of work in introducing mechanization in agricultural production. Zemadel tech 9 no.1:17-32 '63.

1. Vyzkumny ustav zemedelske techniky, Repy.

DUSEK, Antonin, inz.

Organization of complexly mechanized brigades and units.
Zemedel tech 10 no. 7:389-400 J1 '64.

1. Research Institute of Agricultural Technology, Repry near
Prague; Director of the Institute :[inz] M.Preininger.

DUSEK, B.

"Agricultural exhibit in Nitra."

MECHANISACE ZEMEDELSTVI, Praha, Czechoslovakia, Vol. 5, No. 20, October 1955.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959.

Unclassified.

Z/014/61/000/008/003/007
E192/E382

AUTHORS: Dušek, Dzeněk, Engineer and Vrtek, František,
Engineer

TITLE: Influence of the Stray Magnetic Field of a Dynamic
Loudspeaker on Ferrite Antennae

PERIODICAL: Sdělovací technika, 1961, No. 8, pp. 290 - 291

TEXT: The results of an experimental investigation of the influence of a constant magnetic field on ferrite antennae are reported. Also, the stray magnetic fields of three dynamic loudspeakers having a diaphragm with a diameter of 200 mm and magnets of ALNI (type ARO 511), ALNICO (type ARO 533) and an anisotropic oriented ferrite were measured. Several types of ferrite antennae made from LHB (lithium-zinc-ferrite) with initial permeability $\mu_i \sim 50$ and N1B (nickel-zinc-ferrite) and N2 (also nickel-zinc-ferrite) with $\mu_i \sim 200$ were used in the investigation. The changes of the permeability of the antenna coil due to the constant magnetic field were measured at a frequency of 1 Mc/s by means of a Q-meter. The ferrite
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Influence of the Stray

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E192/E382

antenna with its coil was placed in the field of a magnetisation solenoid, where the field could be varied continuously between 0 and 100 Oe. The percentage permeability changes as a function of the applied magnetic field for the three types of ferrite are illustrated in Fig. 1. It is seen that the effect of the external magnetic field on the permeability is less pronounced in the antennae having higher initial permeability. The change of the permeability of the coil depends on the shape of the antenna, in particular, on the so-called demagnetisation factor, N of the antenna, which is proportional to the ratio l/d , where l is the length of the antenna and d is its diameter. The actual magnetic field acting on the antenna is defined by:

$$H = \frac{H^0}{1 + \frac{N}{4\pi\mu}} \quad (4)$$

where H^0 is the external magnetic field. If the data of Fig. 1 are re-plotted by taking N into account, it is found

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Influence of the Stray

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that the influence of the external field is the same for all three types of antenna. In practice, the source of the external field in a radio-receiver is the stray field of the dynamic loudspeaker. Such fields for the above three loudspeakers were measured by means of a permalloy probe containing two primary windings of 240 turns each and a secondary winding of 9 000 turns. The stray field for the ALNI magnet is illustrated in Fig. 5; this shows the lines of constant field in polar coordinates. The fields of the other two loudspeakers are similar in shape to that shown in Fig. 5. There are 7 figures and 2 references: 1 Czech and 1 non-Czech.

Card 3/4

URBAN, Alois; VESELY, Frantisek; DUSEK, Frantisek; LAITICH, Miroslav

Reports on the activities of the branches of the Association
of Czechoslovak Mathematicians and Physicists. Pokroky mat
fyz astr 6 no.1:63-68 '61.

DUSEK, Frantisek (Liberec)

Problems of motion pictures on mathematics. Pokroky mat. fyz. astr.
8 no. 3: 145-153. '63.

DUSEK, Hynak

Bone lesions due to fatigue in soldiers. Rozhl.chir.39 no.12:
821-822 D '60.

(BONE AND BONES dis)
(FATIGUE)

DUSEK, H.

The importance of a professional approach to gynecology. Cesk.
gyn. 28 no.5:289-293 Je '63.

1. Gyn.-por. odd. OUNZ v Bardejove, vedouci MUDr. L. Ovesny.
(GYNECOLOGY) (INDUSTRIAL MEDICINE)
(MATERNAL WELFARE)

DUSEK, J.

CZECHOSLOVAKIA/General and Specialized Zoology - Insects.

P.

Abs Jour : Ref Zhur - Biol., No 9, 1958, 40075

Author : Dushak, J.

Inst : -

Title : The Enemies of the Acacia Pseudoscale.

Orig Pub : Ziva, 1956, 4, No 5, 181-183.

Abstract : A short review of the biology of acacia pseudoscale-
Eulecanium corni- and of its chief enemies: chrysops
cuccutiens, ladybugs (Exochomus quadripustulatus and
others), the snout beetles (Anthribus nebulosus) inclu-
ding a list of Hymenoptera parasites (Blastothrix scri-
cea, Metaphycus punctipes, Phoenodiscus aeneus and others),
flies (Leucopis griseola) and moths (Thalpochara communi-
macula). -- D.P. Dovnar-Zapol'skiy.

Card 1/1

DUSEK, J.

Domestic work rules based on the decision of the 3d Collective Farm Congress.

P. 10, (Rolnicke Hlasy) Vol. 30, no. 4, Aug.1957, Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) Vol. 6, No. 11 November 1957

MAZANEC, K.; DUSEK, J.

Accidental detection of a young, approximately 12-day-old, abnormal human ovum. Cesk. gynek. 27 no.10:723-729 D '62.

1. Katedra histol. a embryol. lek. fak. UJEP v Brne -- Katedra patol. anat. lek. fak. UP v Olomouci.

(OVUM) (UTERINE HEMORRHAGE) (ENDOMETRIUM)

DUSEK, J.; SITAR, M.

Generalized Shwartzman's phenomenon as a cause of death in a child. Cesk.pediat. 14 no.9:837-839 S '59.

1. Pathologicko-anatomicky ustav lebarske fakulty Palackeho university v Olomouci, prednosta doc. MUDr. C. Dvoracek. Detske oddeleni OUNZ, nemocnice v Sumperku, prednosta prim. MUDr.M. Sitar.
(ALLERGY in inf.& child.)

DUSEK, J.

NEORAL, L.

Czechoslovakia

3

Division of Pathological Anatomy OUNZ Olomouc -- Hospital
and Polyclinic (Patologické anatomicke oddeleni OUNZ Olomouc
-- nemocnice a poliklinika ve Sternberku) Sternberg;
Director: L. NEORAL, MD.

Brno, Vnitřní lékařství, No 10, Oct 62, pp 1097-1103.

"Giant Cell Granulomatous Myocarditis in Cases of Diabetes
Mellitus."

Co-authors:

DUSEK, J. Institute of Pathological Anatomy FU (Patologické
anatomický ústav FU v Olomouci) Olomouc; Director: V. VALACH,
MD; TICHÝ, J., First Internal Clinic FU (I. vnitřní klinika
FU v Olomouci), Olomouc.

MARSALEK, Eduard; ZIZKA, Zdenek; RIHA, Vladislav; ~~DUSEK, Jaroslav~~;
DVORACEK, Cestmir

Pulmonary aspergillosis with generalized spreading caused by
Aspergillus restrictus. Cas.lek.cesk.99 no.41:1285-1292 7 0'60.

1. Ustav lebarske mikrobiologie, Plicni oddeleni, Ustav patologicke
anatomie PU v Olomouci.

(ASPERGILLOSIS case reports)
(LUNG DISEASES case reports)

DUSEK, J

NEORAL, L.

Czechoslovakia

CZECHOSLOVAKIA

Handwritten signature and number 3

Division of Pathological Anatomy OUNZ Olomouc -- Hospital
and Polyclinic (Patologické anatomické oddělení OUNZ Olomouc
-- nemocnice a poliklinika ve Sternberku) Sternberg;
Director: L. NEORAL, MD.

Brno, Vnitřní lékařství, No 10, Oct 62, pp 1097-1103.

"Giant Cell Granulomatous Myocarditis in Cases of Diabetes
Mellitus."

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DUSEK, J. Institute of Pathological Anatomy FU (Patologické
anatomický ústav FU v Olomouci) Olomouc; Director: V. VALACH,
MD; TICHÝ, J., First Internal Clinic FU (I. vnitřní klinika
FU v Olomouci), Olomouc.

CERNOHORSKY, J.; DUSEK, J.

The electrocardiographic picture of double infarcts. Cor vasa 5
no.1:1-17 '63.

1. 1st Internal Clinic and the Institute of Pathological Anatomy,
Palacky University, Olomouc.

(MYOCARDIAL INFARCT)

(ELECTROCARDIOGRAPHY)

DUSEK, J.

~~NEORAL, L.~~

CZECHOSLOVAKIA

Czechoslovakia

Division of Pathological Anatomy OUNZ Olomouc -- Hospital
and Polyclinic (Patologicko anatomicke oddeleni OUNZ Olomouc
-- nemocnice s poliklinikou ve Sternberku) Sternberg;
Director: L. NEORAL, MD.

Brno, Vnitřní lékařství, No 10, Oct 62, pp 1097-1103.

"Giant Cell Granulomatous Myocarditis in Cases of Diabetes
Mellitus."

Co-authors:

~~DUSEK~~, J. Institute of Pathological Anatomy PU (Patologicko
anatomicky ustav PU v Olomouci) Olomouc; Director: V. VALACH,
MD; TICHY, J., First Internal Clinic PU (I. vnitřní klinika
PU v Olomouci), Olomouc.

(4)

DUSEK, J.

"Report on the government resolution on the improvement of methods of welding in plants under the supervision of the Ministry of the Metallurgical Industry and Ore Mines and the Ministry of the Machine Industry." p. 353.

"Editorial plan of Svaranie for 1954." p. 354.

Svaranie, Bratislava, Vol. 2, No. 12, Dec. 1953.

SO: Eastern European Accessions List, Vol. 3, No. 11, Nov. 1954, L.C.

DISPATCH

Production, Technical, and Design
Production of Transformer Steel
1983, 11. 1983-1984
the present state of development
former steel production

DUSEK

COUNTRY : USSR
 CATEGORY : Farm Animals. Horses. Q-2
 ABS. JOUR. : RZBiol., No. 4, 1959, No. 16647
 AUTHOR : Bilek, Yan; Dushek, Ya.; Lekhnar, F.
 INST. : -
 TITLE : New Data on the Method of Obtaining Mare
 Milk and on Influencing Its Secretion.
 ORIG. PUB. : Za sots. s.-kh. nauku, 1957, A6, No 3,
 259-288
 ABSTRACT : The activity of the mare's milk gland was
 studied as well as the possibility of in-
 fluencing this gland with the goal in view
 of prolonging the lactation period; the tech-
 niques of milking mares were also studied.
 The experiments were conducted at the work
 bases of the Milicheskoye and Ksaverovskoye
 farms. It was determined that when machine
 milking was employed (with manual auxiliary
 milking at the end of it), the mares were
 CARD: 1/4

Country	:	USSR	
CATEGORY	:	Farm Animals. Horses.	Q-2
ABS. JOUR.	:	RZBiol., No. 4, 1959, No. 16647	
AUTHOR	:		
INST.	:		
TITLE	:		
ORIG. PUB.	:		
ABSTRACT	:	<p>better milked, and the lactative period was extended as compared to manual milking. When the mares were machine milked 5 times the amount of milk obtained in addition to auxiliary manual milking for the total of the 5 milkings fluctuated between 80 and 100 L. There exists a relationship between the activity of the milk gland and the surface temperature of the udder; this relationship is manifested by an increase of the surface temperature during milking as compared to</p>	
CARD:		2/4	

DUSEK, J.

"Effect of training on the usefulness of horses."

VESTNIK. Praha, Czechoslovakia, Vol. 5, No. 7/8, 1958.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959.

Unclassified.

DUSEK, Josef, inz.

Transistor receivers yesterday and today. Sdel tech 9 no.9:346-347
S '61.

DUSEK, Josef, inz.

Economic problems and technical development of electric power
installations, and their faster construction. Energetika
Cz 11 no.4:172-173 Ap '61.

VYKYDAL, J.; RESSL, J.; DUSEK, J.

Pulmonary haemosiderosis in mitral stenosis. Cor. vasa 6 no.2:
112-119'64

1. 1st Internal Clinic and Department of Pathological Anatomy,
Palacky University, Olomouc, Czechoslovakia.

*

NEMEC, J.; HAVEL, J.; DUSEK, J.; KAMENICEK, O.

Bowen's disease of the conjunctiva and cornea. Cesk. oftal. 20
no.3:215-218 My '64.

1. Oční klinika lékařské fakulty PU [Palackého Universita] v Olomouci (prednosta prof. dr. V. Vejnovsky), Oční oddelení OUNZ [Obvodní ústav národního zdraví] v Přerově (vedoucí MUDr. J. Havel), Ústav patologické anatomie lek. fakulty PU [Palackého Universita] v Olomouci (prednosta doc. dr. V. Valach) a Ústřední rentgenologický ústav fakultní nemocnice v Olomouci, (vedoucí doc. dr. J. Doubravský).

CERNOHORSKY, J.; DUSEK, J.

The influence of pulmonary embolism on the ECG pattern of posterior myocardial infarction. Cor vasa 5 no.3:157-164 '63.

1. First Medical Clinic and Department of Pathology, Faculty of Medicine, Palacky University, Olomouc, Czechoslovakia.
(PULMONARY EMBOLISM) (MYOCARDIAL INFARCT)
(ELECTROCARDIOGRAPHY)

AUTHOR: Dušek, Jan

CZECH/37-58-6-12/30

TITLE: Measurement of the Hall Constant and of the Electrical Conductivity in Semi-conductors by a Method Using an Alternating Magnetic Field and Alternating Current
(Měření Hallovy konstanty a elektrické vodivosti v polovodičích metodu střídavého magnetického pole a střídavého proudu)

PERIODICAL: Československý Časopis Pro Fysiku, 1958, Nr 6,
pp 700 - 705 (USSR)

ABSTRACT: The author defines the Hall constant and gives a very brief review of the difficulties involved in its measurement and the various methods which have been devised to overcome them. A method allowing the evaluation of the Hall constant from a single measurement, eliminating the Ettinghausen effect and simultaneously measuring the conductivity of the sample, is described in the present paper. It uses an alternating magnetic field and alternating current, each with a different frequency. A similar method was described by Russel and Wahling (Ref 1). If an electric current with frequency ω_1 flows through a sample of thickness h_1 , which is placed in an

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CZECH/37-58-6-12/30

Measurement of the Hall Constant and of the Electrical Conductivity in Semi-conductors by a Method Using an Alternating Magnetic Field and Alternating Current

alternating magnetic field with frequency ω_2 , the Hall voltage is given by:

$$E_h = \frac{R_h}{h} I_0 \sin \omega_1 t \cdot H_0 \cdot \sin \omega_2 t =$$

$$= \frac{R_h \cdot I_0 \cdot H_0}{2h} [\cos (\omega_1 - \omega_2) t - \cos (\omega_1 + \omega_2) t]$$

where R_h is the Hall constant. The Ettinghausen effect is proportional to $\exp -(\omega_1 - \omega_2/\omega_0)$ (Refs 2,8) and if the difference between the two frequencies is chosen sufficiently large, i.e. about 10 to 20 c.p.s., then the Ettinghausen effect may be neglected. The block-diagram of the apparatus is shown in Figure 2. The output from a well stabilised oscillator (1) with frequency $\omega_1 = 70$ c.p.s. is fed through a network (2)

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CZECH/37-58-6-12/30

Measurement of the Hall Constant and of the Electrical Conductivity
in Semi-conductors by a Method Using an Alternating Magnetic Field
and Alternating Current

to the sample (3). The sample is placed between the poles of an electromagnet (4), which is operated by current of frequency $\omega_2 = 50$ c.p.s., i.e. the mains frequency. The Hall voltage with frequency $\omega_1 - \omega_2$ is amplified with a narrow-band amplifier (5). The frequencies ω_1 and ω_2 were filtered out and the frequency $\omega_1 + \omega_2$ was not passed by the amplifier. The amplified signal is rectified and measured by a millivoltmeter (6). The generator (1) also supplies current of frequency 20 c.p.s. and this is used for the measurement of the conductivity in conjunction with a second amplifier and another pair of contacts on the crystal (Figure 1). In Figure 3 and in the text some details about the circuits employed in the various parts of the apparatus are given. The noise was sufficiently low and the sensitivity and stability were sufficiently high to allow the measurement of Hall voltages of the order of $1 \mu V$ and the resistance

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Measurement of the Hall Constant and of the Electrical Conductivity
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and Alternating Current

of the sample within the range 10^{-5} to $10^3 \Omega$ could be measured. The sample was held by two electrodes which also carried the current through it. The current was kept at a level at which the power dissipated in the sample did not exceed 10^{-2} W. The intensity of the magnetic

field was 3×10^3 Oe. The size of the pole-pieces was 100 x 180 mm and the gap was 80 mm.

To check the performance of the instrument, the temperature-dependence of the Hall constant and of the conductivity of InSb were measured by this fast method and by the slow and cumbersome d.c. method. The discrepancy between the results of the two methods never exceeded 5%. The sign of the Hall constant could be determined from the phase of the output voltage or from a separate measurement of the thermoelectric effect.

There are 4 figures and 8 references, 5 of which are English, 1 Czech, 1 Soviet and 1 German.

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CZECH/37-58-6-12/30

Measurement of the Hall Constant and of the Electrical Conductivity
in Hemi-conductors by a Method Using an Alternating Magnetic Field
and Alternating Current

ASSOCIATION: Ústav technické fyziky ČSAV, Praha
(Institute of Technical Physics, Czech Ac.Sc., Prague)

SUBMITTED: June 18, 1958

Card 5/5

AUTHOR: Dušek, Jan

CZECH/37-59-3-10/29

TITLE: Equipment for Stabilising the Frequency of a Klystron

PERIODICAL: Československý časopis pro fysiku, 1959, Nr 3, pp 270-276

ABSTRACT: The design and tests are described of equipment for stabilizing the frequency of a klystron generator in the 9 200 to 9 500 Mc/s band with a short-period stability better than 10^{-6} and a long-period stability of 1.4 to 1.8 to 10^{-6} . The circuit (see Figure 1) consists of a frequency-modulated klystron with a microwave cavity and a feedback electronic section. The individual frequency deviations of the klystron from the specified frequency are transformed into positive and negative charges of a DC voltage which are superimposed on the voltage of the reflecting electrode of the klystron, thus tuning it to the correct value. This function is fulfilled by a type TE_{011} cavity which behaves as a microwave discriminator when excited by a frequency-modulated wave. The discrimination curves of the cavity are graphed in Figures 2 and 3.

Card1/3 Figure 4 shows the modulation and stabilization circuits ✓

CZECH/37-59-3-10/29

Equipment for Stabilizing the Frequency of a Klystron

of the klystron reflecting electrode. The used circuit enables reducing instantaneous frequency deviations to below 10^4 c.p.s. and long-duration frequency deviations to below 20 c.p.s. The stabilized output signal is frequency modulated with a shift of the order of several hundred kc/s. However, in most metering methods this is not a disadvantage. An advantage of the circuit is that it is easy to produce and to operate. The circuit was developed as a part of equipment for measuring the ferromagnetic resonance of ferrites, which requires a high-frequency stability of the microwave oscillator. The attained stability is adequate for most microwave measurements on ferrites. Acknowledgment is made to Dr. J. Sternberk for his comments on this paper. There are 6 figures and 11 references, of which 2 are Czech, 1 German and 8 English.


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CZECH/37-59-3-10/29

Equipment for Stabilizing the Frequency of a Klystron

ASSOCIATION: Ústav technické fyziky ČSAV, Praha
(Institute of Technical Physics, Czechoslovak Ac.Sc.,
Prague)

SUBMITTED: December 1, 1958



Card 3/3

CZECHOSLOVAKIA/Electricity - Semiconductors.

G

Abs Jour : Ref Zhur Fizika,;No 11, 1959, 25224

Author : Dusek, Jan

Inst : ~~XXXXXXXXXXXXXXXXXXXX~~

Title : Measurement of the Hall Coefficient and the Electrical
Conductivity in Semiconductors by the Method of an
Alternating Magnetic Field and Alternating Current.

Orig Pub : Cheklosl. fiz. zh., 1959, 9, No 2, 250-255

Abstract : See Abstract 25223.

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DUSEK, J.

CZECHOSLOVAKIA/Radio Physics - Radiation of Radio Waves.
Transmission. Lines and Antennae

I

Abs Jour : Ref Zhur Fizika, No 1, 1960, 1713

Author : Hamal, K., Krupicka, S., Dusek, J., Michalik, D.

Inst : -

Title : Certain Applications of Type MnMg Ferrites in Micro-
wave Technology

Orig Pub : Slaboproudý obzor, 1959, 20, No 5, 287-292

Abstract : Certain types of manganese-magnesium ferrites are
used successfully in microwave technology. Physical
and experimental technical data on ferrites of this
type prepared in the laboratory of the Institute of
Technical Physics in Czechoslovakia are reported.

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Z/039/62/023/001/004/007
D291/D303

AUTHOR: Dusek, Jan, Engineer

TITLE: Cavity resonator for studying magnetic resonances

PERIODICAL: Slaboproudý obzor, v. 23, no. 1, 1962, 34 - 39

TEXT: The article, based almost exclusively on Western sources, presents some considerations on the selection of microwave resonator values for the spectroscopy of paramagnetic and ferromagnetic materials. Measurements are performed of the influence of the measured sample upon damping, the sensitivity, and detuning of the cavity, and the mutual influence of some parameters, e.g. the quality factor, the volume, and coupling of the cavity. Investigation of the requirements upon the characteristics of a microwave resonator for spectroscopy of solid materials in the paramagnetic and ferromagnetic region can be summarized as follows: Optimum sensitivity and efficiency requires selection of lowest possible resonant-cavity volume for the given frequency. The layout of the RF-field com-

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Cavity resonator for studying ...

ponents should be as simple as possible (selection of the basic propagation mode), so that the measured sample can easily be placed in the resonator. The quality factor (Q_0) should be the highest possible. It is, therefore, of advantage to use a resonator which is set to a fixed frequency, without a tuning piston and other elements which generally lead to impaired Q_0 . The internal surface of the resonator should also have the highest possible conductivity (silver plating). In an absorption cavity, the coupling values recommended for paramagnetic materials are approximately $\beta = 0.268$, and for ferromagnetic materials approximately $\beta = 0.5$ to 0.27 . A coupling value of $\beta = 1$ should not be selected under any circumstances, however, for transmission cavities, $\beta = 1$ represents the optimum coupling. Reduced magnetic sample losses $1/Q_s$ also represent the maximum permissible cavity damping. Test results demonstrate that the quality factor of the loaded cavity (Q_{0s}) must not drop below half of the quality factor of the empty cavity (Q_0). There are 4 figures, 1 table and 21 references: 3 Soviet-bloc and 18

Card 2/3

Z/039/62/023/001/004/007
D291/D303

Cavity resonator for studying ...

non-Soviet-bloc. The references to the 4 most recent English-language publications read as follows: G. Feher: Sensitivity considerations in microwave paramagnetic resonance absorption techniques. Bell. Syst. Techn. Journ. 36 (1957), no. 2, p. 449; M.W.P. Strandberg: Recording magnetic-resonance spectrometer. Rev. Sci. Instr. 8 (1956), no. 3, p. 596; P.M. Llewellyn: A solid state paramagnetic resonance spectrometer, Journ. Sci. Instr. 34 (1957), no. 6, p. 236; G.E. Spencer and coll: Measurement of microwave dielectric constants and tensor permeabilities of ferrite spheres. Proc. IRE 44, (1956), no. 6, p. 790.

ASSOCIATION: Ústav technické fyziky ČSAV, Praha (Institute of Technological Physics, Czechoslovak AS, Prague)

SUBMITTED: June 14, 1961

Card 3/3

DUSEK, J.; JEZDINSKA, V.

The course of healing of experimental myocardial infarction in the rat. Cor vasa 7 no.2:136-142 '65.

1. Department of Pathology, Medical Faculty, Palacky University, Olomouc, Czechoslovakia.

L 13575-66

ACC NR: AP6006058

SOURCE CODE: CZ/0053/65/014/004/0301/0302

AUTHOR: Lenfeld, J.; Jezdinsky, J.; Dusek, J.

ORG: Department of Pharmacology and Pathological Anatomy, Medical Faculty, Palacky University, Olomouc (*Katedra farmakologie a patologické anatomie lek. fak. UP*)

TITLE: Effect of caffeine, reserpine and apomorphine on inflammatory changes in rats with damaged adrenal medulla [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 29 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 301-302

TOPIC TAGS: drug effect pharmacology, nervous system drug, rat

ABSTRACT: In rats who were surgically or chemically (ethanol) adreno-medullectomized, caffeine, reserpine and apomorphine has less of an anti-exudative effect; even reverted. Thus, adrenomedullary catecholamines rather than serotonin, as stated by others, are apparently mediators of anti-exudative effect of reserpine. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 001

jw

Send 1/1

CERNOHORSKY, J., doc. MUDr.; DUSEK, J., MUDr.

Anatomic and cardiographic picture of rupture of the heart.
Vnitřní lek. 11 no.9:833-841 S '65.

1. I. vnitřní klinika lek. fak. University Palackého v Olomouci
(prednosta prof. MUDr. P. Lukl) a Patologicko anatomický ústav
lek. fak. University Palackého v Olomouci (prednosta doc. MUDr.
Vl. Valach).

CZECHOSLOVAKIA

UDC 616-002.95.122.2-06.616.36

KUBASTA, M.; DUSEK, J.; KUBASTOVA, B.; KODOUSEK, R.; 3rd Internal Clinic Med. Fac. Palacky University (III. Vnitřní Klinika Lek. Fak. PU), Olomouc, Chief (Prednosta) Prof Dr V. PELIKAN; Institute of Pathological Anatomy, Med. Fac. Palacky University (Ustav Patologické Anatomie Lek. Fak. PU), Olomouc, Chief (Prednosta) Docent Dr V. VALACH.

"Liver Affection in Schistosoma Mansoni Infection."

Prague, Casopis Lekarů Ceských, Vol 105, No 49-50, 9 Dec 66, pp 1352 - 1355

Abstract [Authors' English summary modified]: Bioptic liver specimens of patients infected with Schistosoma mansoni, or those where the infection was suspected were examined in 212 fresh samples and in 155 histological sections. Diffuse and permanent embolization of the ova into the liver is an integral part of the infection; the breakdown of eggs in the liver is relatively fast. Fresh hepatic tissue should be examined when ova are not found in faeces or by rectal biopsy. Histological examination reveals the extent of the damage. 12 Figures, 4 Czech, 3 Egyptian, 2 Jap-

DUSEK, Jindra, inz. (Zemedelska 1, Brno).

Larvae of *Clythia fasciata* Meigen (Diptera, Clythiidae).
Cas entom 59 no.3:209-213 '62.

1. Institut fur angewandte Entomologie der Agronomischen Fakultat,
Brno.

DUSEK, Jindra, inz. (Brno, Zemedelska 1); LASKA, Pavel, inz. (Praha -
Dejvice, Zengrova 5)

Contribution to the knowledge of some syrphus fly larvae (Diptera,
Syrphidae). Cas entom 59 no.4:348-356 '62.

1. Institut fur angewandte Entomologie der Agronomischen Fakultat,
Brno (for Dusek). 2. Tschechoslowakische Entomologische Gesellschaft,
Praha (for Laska).

DUSEK, Jindra, inz. (Brno , Zemedelska 1); LASKA, Pavel, inz. (Praha -
Dejvice, Zengrova 5)

A contribution to distinguishing the European species of
the subgenus Syrphus Fabricius (Diptera, Syrphidae) according
to male genitalia and larvae. Cas entom 61 no.1:58-70 '64.

1. Institute of Applied Entomology , University School of
Agriculture, Brno and the Czechoslovak Entomological Society,
Praha.

DUSEK, Jindra, inz. (Brno, Zemědělská 1)

Puparium of *Conops vesicularis* Linne (Diptera, Conopidae).
Cas entom 61 no.2:85-88 '64.

1. Institute of Applied Entomology of the Faculty of Agronomy,
Higher School of Agriculture, Brno.

DUSEK, Jindra, inz. (Brno, Zamedelska 1); ROZKOSNY, Rudolf, dr. (Brno, Kotlarska 2)

Revision of Central European species of the Stratiomyidae (Diptera) family with special regard to the Czechoslovak fauna. Pt.2. Cas entom 61 no.4:360-373 O '64.

1. Institute of Applied Entomology of the Higher School of Agriculture, Brno (For Dusek). 2. Chair of Systematic Zoology of the Faculty of Natural Sciences of the Purkyne University, Brno (for Rozkosny). Submitted November 3, 1963.

9 (2)

CZECH/14-59-12-9/41

AUTHOR: Dušek, Josef, Engineer

TITLE: Single-Ended Transistorized Power Amplifier

PERIODICAL: Sdělovací technika, 1959. Nr 12. pp 452-454

ABSTRACT: For the design of transistorized power amplifiers, a whole series of special and often disadvantageous features of transistors are of great importance. Since the characteristic feature of transistors is a low input impedance and reaction of the output on the input circuit, it is necessary to consider the influence of the external peripheral elements in the input circuit and the influence of the resistance of the signals generator R_g . For instance in the case of a transistorized amplifier in connection with the common emitter (UE) the small resistance R_g decreases the non-linear distortion and increases the limit frequency of the amplifier. Considered must be above all the following magnitudes: U_{Kmax} - maximum cutoff voltage of the transistor: I_{Kmax} - maximum stand-still collector

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CZECH/14-59-12-9/41

Single-Ended Transistorized Power Amplifier

current; $P_{K \max}$ - maximum allowed idle power; f_{mez} - limit frequency of the amplifier. As to the connection to be chosen, there are only 2 possibilities: connection with the common basis (UB) and with the common emitter (UE). From the point of view of impedance, the UE connection is the most advantageous. To date, inaccurate or complex graphic methods have been used for calculating the transistorized power amplifier; these methods were formerly applied in designing tube amplifiers. The data needed are as follows; a) the optimum working point for a given transistor type; b) the optimum resistance of the R_g generator; c) the optimum loading resistance R_z ; d) the value of the non-linear distortion σ . Further the author analyzes the graphic method of designing power transistors. With a simple basic connection it is possible to measure the dependence of σ (non-linear distortion) of the whole amplifier on the choice of U_K (cutoff voltage of the collector), I_K (collector current) R_g (resistance of the signal generator). Fig 1 presents the circuit dia-

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Single-Ended Transistorized Power Amplifier

gram of a power transistor, the measured values being valid for the Soviet transistor P13, which at present is mostly used for power transistors with an alternating output up to 200 mw. The dependence of the total distortion of the amplifier on the loading resistance for various alternating output is presented in Fig 2, and Fig 3 illustrates the dependence of the general distortion of the amplifier on the loading resistance for various working points. Fig 5 shows the dependence of the total distortion of the amplifier on the voltage of the battery at various alternating outputs; Fig 6 presents its dependence on the loading resistance at varying feeding voltage; Fig 7 illustrates its dependence on the battery voltage for various loading resistances and collector currents and Fig 8 its dependence on the voltage between the emitter and collector. Concluding, the author reviews the reaction of an amplifier with a Soviet transistor P 13 in connection with the common emitter at a varying loading resistanc-

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Single-Ended Transistorized Power Amplifier

ce R_Z and a constant output P_Y : 1) the minimum distortion is achieved at R_Z opt; 2) the lowest necessary voltage of the battery U_b can be obtained if the $R_Z < R_Z$ opt; 3) With an increasing R_G the distortion increases at R_Z opt and increases more rapidly at $R_Z > R_Z$ opt. For the most commonly used transistor type, the author concludes, it is possible to establish in 3 basic measurements not only the optimum working point, the resistance R_G opt and the loading resistance R_Z opt, but also the value of the non-linear distortion during a change of these basic parameters. Thus, graphs can be obtained permitting a quick and accurate design of the amplifier by a mere reading of the basic values and without any calculations. There are 7 graphs, 1 circuit diagram and 3 Czech references.

✓

Card 4/4

DUSEK, Josef, inz.

Condensing electric power plants. Energetika 12 no.1:Suppl.15-9
Ja '62.

DUSEK, Josef, inz.

Calculation of the transistorized radiofrequency circuits.
Sdel tech 9 no.6:229 Je '61.

DUSEK, Josef, Jr.

"Blasting of rocks and their mechanics." Reviewed by Josef Dusek.
Rudy 11 no.4:144 Ap. '63. 4

L 33686-66 EWP(k)/EWP(t)/ETI IJP(o) JD/HW
 ACC NR: AP6024251 SOURCE CODE: CZ/0034/65/000/010/0723/0729 40

AUTHOR: Dusek, Josef (Engineer); Kochanovska, Adela (Professor; Doctor); Wotruba, Karel (Doctor); Lasek, Jiri (Engineer) 13

ORG: [Dusek] Research Institute of Ferrous Metallurgy, Prague (Vyzkumny ustav hutnictvi zezeza); [Kochanovska; Wotruba; Lasek] Institute of Solid State Physics, CSAV, Prague (Ustav fyziky pevných latek CSAV)

TITLE: Effect of inclusions on the initial permeability of hot-rolled transformer plates 6

SOURCE: Hutnicke listy, no. 10, 1965, 723-729

TOPIC TAGS: aluminum containing alloy, electric transformer, annealing, metallurgic furnace, ammonia

ABSTRACT: Hot-rolled transformer plates containing, respectively, 0.012 and 0.09 percent Al, annealed for a long time in a tunnel furnace at 820 to 840°C, were subjected to another refining in an atmosphere of pure H and cracked ammonia, at a temperature range of 700 to 1100°C. A relationship was found between the course of the initial permeability and the variations in the content and form of structural particles, particularly iron carbide, aluminum nitride and silicon nitride, in both the starting state and after refining. The effect of cracked ammonia on the heats with the higher Al content was found to be very detrimental. Orig. art. has: 3 figures and 3 tables. [Based on authors' Eng. abst.] [JPRS]

SUB CODE: 11, 13, 09 / SUBM DATE: none / ORIG REF: 001
 Card 1/1 PB UDC: 621.3.002.3: 669.14.018.583 0915 1902

DUSEK, J.; TOMSU, M.

Damage to the heart in experimental dogs during operations on the heart with the use of extracorporeal circulation. Rozhl. chir. 41 no.6:413-419 Je '62.

1. Patologickoanatomicky ustav lekarske fakulty University Palackeho v Olomouci, prednosta doc. dr. Vl. Valach Chirurgicka klinika lekarske fakulty University Palackeho v Olomouci, prednosta prof. dr. Vl. Rapant, DrSc.

(HEART mechanical) (HEART SURGERY experimental)
(MYOCARDIUM wds & inj)

DUSEK, K.

Structure of ion exchange substances. Pt. 5. Coll Cz Chem
28 no.9:2513-2517 S '63.

1. Forschungsinstitut für synthetische Harze und Lacke,
Pardubice.

SAYDL, I. [Seidl, J.] (Pardubitz, Chekhoslovatskaya Sotsialisticheskaya Respublika); MALINSKI, Ya. [Malinsky, J.] (Pardubitz, Chekhoslovatskaya Sotsialisticheskaya Respublika); DUSHEK, K. [Dusek, K.] (Pardubitz, Chekhoslovatskaya Sotsialisticheskaya Respublika)

Ion exchanger bodies with a porous structure based on styrene and divinylbenzene copolymers. Plast.massy no.12:7-11 '63. (MIRA 17:2)

DUSEK, K.; LIBUSOVA, E.

Paranoid hallucinatory syndrome in hepatolenticular degeneration. Cesk. psychiat. 10 no.2:116-119 Ap'64.

1. Psychiatricka lecebna v Havlickove Brode.

*

CZECHOSLOVAKIA

DUSEK, K.

Research Institute for Synthetic Resins and Lacquers,
Pardubice.

Prague, Collection of Czechoslovak Chemical Communica-
tions, No 11, November 1965, 3804-3821.

"Ion exchange framework. Part 14: Velocity in ion ex-
change in strong acid cation exchange with porous stru-
cture."

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411610020-6

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411610020-6"

Dubek, K.

139. New method for the colorimetric determination of formaldehyde. K. Dubek and S. Hudeček (Výzkumný ústav syntetických pryskyřic Pardubice, Czechoslovakia) (Chem. Listy, 1954, 48 (11), 1629-1633).—A new reagent for the colorimetric determination of formaldehyde, possessing a number of advantages over Schiff's reagent, is prepared as follows. Crystalline Na_2SO_3 (12.1 g) is dissolved in a soln. of methyl violet (0.6 g) in H_2O (400 ml) containing conc. HCl (5 ml). After more conc. HCl (5 ml) has been added, the soln. is diluted to 500 ml, set aside for 8 hr., then treated with activated charcoal (0.5 g) and, after 5 min., is filtered. The almost colourless reagent forms with formaldehyde a colour with an absorption max. at $\approx 378 \text{ m}\mu$. The extinction curve of the new reagent, unlike that of Schiff's, is linear for a certain concn. range of formaldehyde (0.09 to 0.44 mg per ml). Formaldehyde can be determined after 1 hr. in the presence of a 2 to 3-fold excess of acetaldehyde at a pH as high as 3. G. GLASER

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411610020-6

Došek, Karel

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411610020-6"

DUSEK, K.

"Paper chromatography of primary products of urea condensation with formaldehyde.
In German"

p. 732 (Collection of Czechoslovak Chemical Communications, Sbornik Chekhoslovatskikh Khimicheskikh Rabot) Vol. 22, no. 3, June 1957
Prague, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

DUSEK, K. ; SMETANA, C.

Standardization of tape recorders.

P. 17. (SDELOVACI TECHNIKA) (Praha, Czechoslovakia) Vol. 6, no. 1, Jan. 1958

SO: Monthly Index of East European Accession (EEAI) LC Vol. 7, No. 5, 1958

Country	: Czechoslovakia	I
Category	: High Molecular Chemistry	
Abs. Jour	: Referat Zhur--Khim., No 11, 1959,	41164
Author	: <u>Dusek, K.</u>	
Institut.	: Not given	
Title	: On the Problem of the Determination of the Molecular Weights of Aminoplastics	
Orig Pub.	: Chem Prumysl, 8, No 6, 321-326 (1958)	
Abstract	: The article contains a critique of the cryoscopic and viscosimetric determination of the molecular weights of urea-formaldehyde resins in formic acid. The author has investigated the behavior of the primary products of the condensation of urea, thiourea, and melamine with formaldehyde in anhydrous formic and acetic acids. Cryoscopic and chromatographic methods were used in establishing that the monomethylol derivatives of urea, thiourea, and melamine in the above-indicated acids split into two molecules, whereas the dimethylol derivatives split into three fragments. The formation	

Card: 1/3

Vyzk ust. SYNT. PRYSTYRIC, PARDUBICE

Country	: Czechoslovakia	E-3
Category	:	
Abs. Jour	:	45618
Author	:	
Institut.	:	
Title	:	
Orig Pub.	:	
Abstract	: NaCl, and the solution is diluted to 5 liters) are added, the cuvette is placed in the colorimeter, and the titration is carried out with the NaOH solution described above until the needle of the galvanometer shows a deflection when 0.1 ml of titrant is added; the reference solution used consists of a mixture of 5 ml of 10% $\text{NH}_4\text{OH} \cdot \text{HCl}$, 7 ml water, and 50 ml MO solution. The error in the determination is $\pm 0.25\%$. The method has been used in studying the reaction of CH_2O with thiourea in acid medium.	
	T. Levi	
Gard:	3/3	

DUSEK, K.; STAMBERG, J.

Character of sorption processes in decolorizing with ion exchangers. p. 489.

CHEMICKY PRUMYSL. (ministerstvo chemického průmyslu) Praha, Czechoslovakia,
vol. 9, no. 9, Sept. 1959.

Monthly List of East European Accessions (BEAI), LC, Vol. 8, no. 11, Nov. 1959
Uncl.

DUSEK, K.; CERNY, J.

Study of the stability of unreaformaldehyde compounds. p. 391.

TEXTIL. (Ministerstvo lehkého průmyslu) Praha, Czechoslovakia, Vol. 14,
no. 10, 0 ct. 1959.

Monthly list of East European Accessions (EEAI), Vol. 9, no. 1, Jan. 1960

Uncl.

80379

Z/009/60/010/05/038/040
E112/E153

5.5700

AUTHORS: Karel Dušek and Richard Chroměček
TITLE: Chemical Resistance of Strongly Acidic Cationic
Exchange Resins¹

PERIODICAL: Chemický Průmysl, 1960, Vol 10, Nr 5, pp 267-273

ABSTRACT: The effects of different oxidizing agents such as hydrogen peroxide, nitric acid, chromic acid, potassium permanganate and chlorine water on several cation exchange resins are studied. The following types of cation

- 1) Katex S (Czechoslovakia) Sulphonated polystyrene.
- 2) Katex FN (Czechoslovakia) Polycondensation product of phenol-sulphonic and beta-naphthalene sulphonic acid with formaldehyde. Prototype of polycondensation products, as all the following compounds are of the same type.
- 3) Wolfatit F (Germany). Polycondensation product of benzaldehyde disulphonic acid and phenol with formaldehyde.
- 4) Wolfatit P (Germany). Polycondensation product from sodium bisulphate and phenol, followed by

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Chemical Resistance of Strongly Acidic Cationic Exchange Resins

5) Katex F Extra (Czechoslovakia). Polycondensation product from phenol, sodium bisulphite and formaldehyde.
6) KU-IG¹(USSR). Polycondensation product of paraphenol sulphonic acid and formaldehyde, followed by sulphonation.
7) Na. (Czechoslovakia). Polycondensation product from naphthalene-sulphonic acid, and formaldehyde.
8) N β (Czechoslovakia). Polycondensation product from naphthalene-sulphonic acid and formaldehyde.
Effect of Hydrogen Peroxide. Results are tabulated, indicating that 3% hydrogen peroxide solution will attack already in 9 cycles the majority of the exchange resins of the polycondensation type. Katex S and Wolfatit P proved stable; least stability is shown by N and Katex FN. The degradation is catalysed by metallic ions. Both ferrous and ferric ions led to a rapid degradation of the exchangers. It is held by the authors that the mode of degradation is the severing of the methylene bridge.
Effect of Nitric Acid. Katex F proved completely stable. Katex F Extra and the two naphthalene-sulphonic acids proved almost equivalent. Wolfatit P had poor resistance.

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Chemical Resistance of Strongly Acidic Cationic Exchange Resins

It is postulated that in some cases nitration of the ring may take place.

Action of Chromic Acid. All exchange resins with the exception of Katex S are completely degraded. Similar experiments are described by Raymond L. Costa, Industrial and Engineering Chemistry, Vol 42, 1950, pp 309-311.

Effect of Potassium Permanganate. Katex S is practically destroyed after the second cycle and Katex N already destroyed during first cycle. Katex F Extra and Wolfatit P showed comparatively good stability. ✓

Action of Chlorine Water. It is interesting to note that Na showed a considerably better stability than the β isomer which is already degraded during the first cycle. It is suggested that the sulphonic acid groups activate the bonds towards oxidizing agents and that the mechanism of breakdown is fission of the methylene bond.

There are 8 tables and 21 references, of which 14 are English, 3 German, 3 Soviet and 1 Czech.

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Chemical Resistance of Strongly Acidic Cationic Exchange Resins
ASSOCIATION: Výzkumný ústav syntetických pryskyřic a laků,
Pardubice
(Research Institute of Synthetic Resins and Paints,
Pardubice)

SUBMITTED: October 30, 1959

Card 4/4

DUSEK, K.

Polarographic behavior of condensation products of thiourea with formaldehyde in an acid medium. Coll Cz Chem 25 no.1:47-54 Ja '60.
(EEAI 9:12)

1. Forshchungsinstitut fur synthetische Harze und Lacke,
Pardubice.

(Polarograph and polarography)

(Condensation, Chemical)

(Thiourea)

(Formaldehyde)

Z/039/60/021/01/008/040
E140/E135

AUTHOR: Karel Dušek (Engineer, Candidate of Technical Sciences)

TITLE: Choice of Working Point in Magnetic Recording

PERIODICAL: Slaboproudý Obzor, 1960, Vol 21, Nr 1, pp 34-35

ABSTRACT: A relatively simple method consisting of varying the magnetic bias signal from 0 to a maximum value, recording a low-frequency very small signal is described. The output signal is then proportional to the derivative of the dynamic characteristic of the tape and from its maximum the proper magnetic bias may be found. The references were published in the author's previous work in Slaboproudý Obzor, Vol 19, Nr 12, p 874, concerning the measurement of the dynamic characteristics of magnetic recording tapes. There are 3 figures.

Card
1/1

ASSOCIATION: Katedra zvukové a filmové techniky
(Chair for Sound and Film Engineering)

SUBMITTED: September 5, 1959

DUSEK, K.

Reaction kinetics of thiourea with formaldehyde. II. Acid-base
catalysis of the addition of formaldehyde. Coll Cz Chem 25 no.1:
108-123 Ja '60, (EEAI 9:12)

1. Forschungsinstitut für synthetische Harze und Lake, Pardubice.
(Thiourea) (Formaldehyde) (Catalysis)

~~DUSEK, K.,~~ ZAHRADNIK, R.

Calculation of the constants of velocity of reactions in which the dependence of concentration functions in time is expressed by total of exponential functions. Coll Cz Chem 25 no.5:1413-1422 My '60.

1. Forschungsinstitut für synthetische Harze und Lacke, Pardubice und Institut für Arbeitshygiene und Berufskrankheiten, Prag.

Z/009/61/000/008/004/005
E112/E153

AUTHORS: Dušek, Karel, Seidl, Josef, Malinský, Jaroslav, and
Dušková, Dagmar

TITLE: Evaluation of the swelling capacity of ion-exchangers
based on styrene-divinylbenzene copolymers

PERIODICAL: Chemický průmysl, 1961, No.8, pp. 439-443

TEXT: The present paper is part of an investigation of the properties of ion exchange resins derived from styrene-divinylbenzene copolymers. The swelling capacity of tridimensional polymers provides an important clue to their internal structure and to the number of cross-linkages. The swelling capacity of styrene-divinylbenzene copolymers plays an important role when introducing functional groups, e.g. chloromethylation, followed by quaternation, and has an important bearing on the properties of the final exchange resins. The authors have assessed different methods for the determination of swelling capacity and have arrived at these conclusions. 1) Centrifugation method. Simple, and suitable for series of comparative tests. Reproducibility of results very satisfactory. Sources of errors may be incomplete removal of

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Evaluation of the swelling capacity...Z/009/61/000/008/004/005
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solvent from the resin particles. Caution is recommended when determining swelling characteristics of copolymers with only a few cross-links, because the gravitational field of the centrifuge could affect the real swelling capacity. The method is not very suitable for the study of temperature effects on swelling characteristics. 2) Isothermic distillation in desiccators. Method is experimentally very simple, but not quite exact. Errors may be caused by evaporation of solvent between opening of the desiccator tap and closing of weighing bottle. Efficient thermostating of the whole system (including desiccator tap) is essential. 3) Isothermic distillation with spring balance. A diagrammatic sketch of apparatus is shown in Fig.2. The method permits the rate of sorption to be followed and temperature effects to be studied. The equipment should be placed in an air thermostat. The main advantage of the method is given by the fact that the entire sorption isotherms can be computed. 4) Dilatometric method. Provides the only means of measuring changes of volume produced by swelling; it is not suitable for finely granulated copolymers because mercury is incapable of filling up completely all the areas between the spherical particles. Maxima of

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deviations for copolymers of comparatively small granular size (0.1 to 0.2 mm) may amount to as much as $\pm 10\%$. The dilatometric method permits the determination of the temperature effects on swelling characteristics. 5) Microscopic method. Not very accurate, allowing only linear changes of granular dimensions to be measured. Can be used with advantage to determine swelling characteristics of individual granules. The above mentioned procedures are not applicable to porous copolymers. Results obtained by the different methods are tabulated, showing the swelling of styrene-divinylbenzene copolymers (with increasing proportions of divinylbenzene) in toluene and chloroform. There are 4 figures, 4 tables and 15 references: 7 English, 5 German, 2 Soviet and 1 Czech.

The English language references read:

Ref.3: H.P. Gregor, K.M. Held and J. Bellin. Anal. Chem. V.23, 620 (1951).

Ref.10: K.W. Pepper. J. Appl. Chem., 1, 124 (1951).

Ref.11: K.W. Pepper. J. Chem. Soc., 1952, 2129.

Ref.14: L.R.G. Treloar. Proc. Roy. Soc. A 200, 176 (1950).

Card 3/5

Evaluation of the swelling capacity... Z/009/61/000/008/004/005
E112/E153

ASSOCIATION: Výzkumný ústav syntetických pryskyřic a laků,
Pardubice (Research Institute for Synthetic Resins
and Paints, Pardubice)

SUBMITTED: January 15, 1961

Card 4/5

MUSEK, K.

CS&R

Research Institute for Synthetic Resins and Lacquers, Pardubice

Prague, Collection of Czechoslovak Chemical Communications, No 12, 1962,
pp 2841-2853

"Ion Substitute Frameworks III. Copolymers of Styrol with Divinylbenzol.
Elastic Behavior of Copolymers Originating in Toluol"

DUSEK, K.

Conference on structure and mechanical properties of polymers.
Chem prum 12 no.9:526 S '62.

1. Vyzkumny ustav syntetickych pryskyric a laku, Pardubice.

Z/009/63/000/001/005/006
E112/E535

AUTHORS: Dušek, K. and Horák, O.

TITLE: Conference on some problems of macromolecular chemistry

PERIODICAL: Chemický průmysl, no.1, 1963, 53-54

TEXT: The conference, organised by the Ústav makromolekulární chemie ČSAV (Institute of Macromolecular Chemistry, ČSAV) was held in Prague in September 1962. There were three independent sections. In Section I, relating to macromolecular structures and mechanical properties, the following subjects were reported on: V. Svoboda and O. Karásek (VÚSK, Gottwaldov): effects of "spherical" purity of polydienes on their physical properties; K. Dušek (VÚSPL, Pardubice): elastic properties of styrene and divinylbenzene copolymers; J. Majer and Stejný (VÚMCH, Brno): thermal history of paraformaldehyde and the effect on its properties; J. Hugo and M. Jirouš (SVÚMT, Prague): rheological studies for determining the mechanical properties of polyvinylchloride; M. Možíšek (VÚGPT, Gottwaldov): determining the dispersion of elastomers by tracer elements; L. A. Igonin (NIIPM, Moscow): effects of macromolecular

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Conference on some problems of ...

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structures on the mechanical properties of crystalline polymers;
V. Zilvar, J. Boukal and J. Hell (SVÚMT, Prague): structure and
properties of alkaline polyamides compared to hydrolytic polyamide;
N. F. Bakeyev (Leningrad): structural peculiarities of various
macromolecular spherulites, e.g. poly-ethylenesebacate;
Z. Pelzbauer (ÚMCH ČSAV, Prague): study of the macromolecular
structure of caprolactam by electron microscopy and electron
diffraction.

In Section II, relating to the study of polymers by physical and
physico-chemical methods, the following subjects were reported on:
M. Bohdanecký (ÚMCH ČSAV, Prague): possibility of indirect
determination of constant K in Mark-Kuhns' equation; P. Munk and
P. Lesse (ÚMCH ČSAV, Prague): new methods for the determination of
diffraction during flow; J. Moravec (VÚGPT, Gottwaldov): study of
various viscometers; M. Bohdanecký, P. Kratochvíl, P. Munk,
O. Quadrat (ÚMCH ČSAV): aggregation of molecules, determined by
viscosity, light-scattering and diffraction methods during melt-
flow; M. Hloušek (VUMCH, Brno): determination of polydispersion of
latex particles by means of scattering of transmitted light;
M. Kubín and E. Prokopová (ÚMCH ČSAV, Prague): synthetic gels for
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the separation of high- and low-molecular weight substances;
J. Poláček (ÚFCH ČSAV, Prague): modification of the Baker-Williams
fractionation column; J. Biroš and J. Pouchlý (ÚMCH ČSAV, Prague):
new microcalorimeter and ebulliometer with thermistor recording;
J. Jokl (ÚMCH ČSAV, Prague): infrared studies of the structure of
polycaprolactam; D. Doskočilová (ÚMCH ČSAV, Prague): newer
determination of the structure of poly- γ -methyl- ϵ -caprolactam by
infrared spectrography; J. Jakeš (ÚMCH ČSAV): effects of non-
homogeneity of solid polymer dispersions on absorption spectra;
F. Rybníkář (VÚGPT, Gottwaldov): secondary crystallisations in
samples of polypropylene and polyamides; Z. Menčík (VÚMCH, Brno):
crystalline structure of polyethylene-2,6-dinaphthionate;
H. Prokopová and Z. Pelzbauer (ÚMCH ČSAV, Prague): microscopic
studies of polyvinyl particles.

In Section III, relating to accelerated polymerisation of
caprolactam, the following subjects were reported on:

J. Stehliček (ÚMCH ČSAV, Prague): catalysts for the alkaline
polymerisation of caprolactam; A. P. Grekov (USSR): accelerated
polymerisation of caprolactam in solvents; P. Čefelín (ÚMCH ČSAV):
polymerisation of pure γ -methyl-6- caprolactam, using tetraacetyl-
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Conference on some problems of ... Z/009/63/000/001/005/006
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hexamethylenediamine as accelerator; B. Lánská (ÚMCH ČSAV): study of structure of imido-groups in polycaprolactam; J. Šebenda (ÚMCH ČSAV): effect of end-groups on the viscosity characteristics of polycaprolactam solutions; N. M. Malinko (USSR): infrared analysis of the structure of polycaprolactam, prepared by accelerated polymerisation; B. Puffr (ÚMCH ČSAV): equilibrium studies of the adsorption of water by polycaprolactam; P. Schmidt (ÚMCH ČSAV): infrared analysis of the effects of water on polycaprolactam; J. Tomka (ÚMCH ČSAV): morphological study of the structure of polycaprolactam; V. A. Sergeyev (USSR): practical procedures for the production of polycaprolactam by the accelerated polymerisation method; J. Výlet (VUGPT, Gottwaldov): pilot-plant results with the alkaline block polymerisation of caprolactam.

ASSOCIATION: Výzkumný ústav syntetických pryskyřic a laků
(Research Institute of Synthetic Paints and Resins)

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L 17206-63

EMP(j)/BDS ASD Pc-4 RM

ACCESSION NR: AP3005974

Z/0009/63/000/008/0436/0441

AUTHOR: Dusek, Karel

TITLE: Rate of swelling of ion exchange matrices on the basis of styrene-divinylbenzene copolymers in relation to their structure. I. Standard copolymers

SOURCE: Chemicky prumysl, No. 8, 1963, 436-441

TOPIC TAGS: Swelling rate, ion exchange matrix, substitution rate, side reaction, desorption, styrene-divinylbenzene copolymer, crosslinking

ABSTRACT: The rate of diffusion in three-dimensional ion-exchange matrices depends on the latter's structure, and may be used in predicting conditions for the introduction of substituents into their structure. The swelling of granules of a copolymer of styrene and divinylbenzene by the diffusion of a solvent is influenced by internal stresses due to the transition of the polymer from a glass state into a rubbery state. The highest decrease in the rate of swelling corresponds to 2% conc. of divinylbenzene in the copolymer. Measuring the rate of deswelling shows that the rate of diffusion in a swelled polymer is relatively high. These rates are important for the introduction of substituents into the matrix; to prevent unwanted side reaction preswelling in a suitable solvent may be used. Such

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ACCESSION NR: AP3005974

reactions can take place even when the correct swelling agent was used, if the preswelling was not conducted far enough. The mean diffusion coefficient of toluene decreases with the increasing degree of crosslinking. The rates of initial adsorption and desorption may differ by several orders of magnitude; these differences increase with the increase in crosslinking. This is probably due to the differences in the rate of diffusion in a gel and a glassy polymer. The rate of swelling does not indicate the rate of interdiffusion and the rate of ion exchange, when the rate is determined by the diffusion in the matrix. The rate of adsorption at low tensions and the swelling in bad solvents is very slow; during desorption the last traces of the solvent are removed only with difficulty. Orig. art. has 8 figures and 2 tables.

ASSOCIATION: Vyzkumny ustav syntetickych pryskyric a laku, Pardubice (Research Institute for Synthetic Resins and Lacquers)

SUBMITTED: 01 Feb 63

DATE ACQ: 27 Aug 63

ENCL: 00

SUB CODE: CH, MA

NO REF SOV: 001

OTHER: 018

Card 2/2

DUSEK, Karel; SEIDL, Josef; MALINSKY, Jaroslav

Swelling rate of ion exchange skeletons based on copolymers of styrene with divinyl benzene depends on their structure. Pt. 2. Chem prum 13 no. 12: 662-666 D '63.

1. Vyzkumny ustav syntetickych pryskyric a laku, Pardubice.

CZECHOSLOVAKIA

DUSEK, K.

Research Institute of Synthetic Resin and Laquer (Forschungs-
institut für synthetische Harze und Lacke), Pardubice

Prague, Collection of Czechoslovak Chemical Communications,
No 9, 1963, pp 2513-2516

"Ion Exchange Stage V. Polyfunctional Network Units
Containing Styrol-Kopolymers."

DUSEK, Karel

"Phenoplasts" by St. Hudecek. Reviewed by Karel Dusek. Chem
prum 14 no.2:110 F'64

1. Vyzkumny ustav syntetickych pryskyric a laku.

CZECHOSLOVAKIA

SEIDL, J; DUSEK, K

Research Institute for Synthetic Resins and Lacquers,
Pardubice - (for both)

Prague, Collection of Czechoslovak Chemical Communications,
No 7, July 1966, pp 2695-2700

"On the skeletons of ion exchangers. Part 17: Equilibria
in ternary systems composed of styrene copolymer with
divinylbenzene, toluene and 2,2,4-trimethylpentane or
n-butyl alcohol."

L 29415-66

ACC NR: AP6019957

SOURCE CODE: CZ/0079/65/007/003/0243/0243

AUTHOR: Dusek, K. (Havlickuv Brod); Libus, J. 22

ORG: Psychiatric Hospital, Havlickuv Brod (Psychiatricka lecebna) B

TITLE: Clinical comparison of prochlorperazine and thiopropazine in psychotic illness ²² [This paper was presented at the 7th Annual Psychopharmacological Meeting, Jesenik, 20-23 January 1965/]

SOURCE: Activitas nervosa superior, v. 7, no. 3, 1965, 243

TOPIC TAGS: psychoneurotic disorder, drug treatment

ABSTRACT: 37 patients suffering from various types of schizophrenia were administered prochlorperazine (Spofa) for 6-8 weeks in amounts of 60-150 mg/day. Thiopropazine (Majeptil; Spofa) was administered to 18 schizophrenics for 30 days in amounts of 15 mg/day. Both drugs, dosed adequately, attain approximately the same therapeutic results, which are more marked in acute schizophrenia than in chronic cases. The therapeutic effect does not depend on the occurrence of the extrapyramidal symptomatology, which can be entirely prevented with triphenidyl.

Orig. art. has: 1 table. [Orig. art. in Eng.] [JPRS]

SUB CODE: 06/ SUBM DATE: none

Card 1/1 CC

L 29411-66

ACC NR: AP6019970

SOURCE CODE: CZ/0079/65/007/003/0255/0255

AUTHOR: Libus, J. (Havlickuv Brod); Dusek, K.

ORG: Psychiatric Hospital, Havlickuv Brod (Psychiatrica lecebna)

TITLE: Electroencephalographic patterns in schizophrenia treated with ataractics
 [This paper was presented at the 7th Annual Psychopharmacological Meeting, Jesenik,
 20-23 January 1965]

SOURCE: Activitas nervosa superior, v. 7, no. 3, 1965, 255

TOPIC TAGS: EEG, psychoneurotic disorder, chlorpromazine, drug treatment

ABSTRACT: Treatment with ataractics slows down the basic rhythm of the EEG, increases the amplitude, theta and delta activity; synchronization of rhythms and paroxysmal dysrhythmia are induced. 86 schizophrenics were treated with chlorpromazine, levomepromazine, chlorprothixene, and perphenazine. No marked differences in the EEGs due to the use of any of the mentioned drugs were found. The differences were greatest at the time when the drug was first administered; they diminished with the patient's adaptation to the drug. [Orig. art. in Eng.] [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 002 / OTH REF: 008

L 31475-66 ETC(f) DS

ACC NR: AP6023167

SOURCE CODE: CZ/0008/65/000/011/1353/1357

AUTHOR: Dusek, Karel; Leseck, Jan; Haerberle, Kurt

56

ORG: Research Institute for Synthetic Resins and Lacquers, Pardubice (Vyzkumny
ustav syntetickych pryskyric a laku)

B

TITLE: Recorded measurements of conductivity of solutions in the determination of
the rate of ion exchange in ion-exchange resins

SOURCE: Chemické listy, no. 11, 1965, 1353-1357 1

TOPIC TAGS: ion exchange resin, electric conductivity, ion

ABSTRACT: The authors describe an apparatus which they designed using materials
that are obtainable in Czechoslovakia. The calibration of the instrument is
described. The concentrations of the ions can be found from calibration curves.
The electrodes are made of platinum foil, are in cylindrical shape, and have a
common axis. Orig. art. has: 3 figures and 3 formulas. [JPRS]

SUB CODE: 07, 20 / SUBM DATE: 05Oct64 / ORIG REF: 001 / OTH REF: 002

Card 1/1mc

0915

1378